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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,807	10/02/2000	Larry W. Depoorter	D-42716-01	2936

7590
Cryovac Inc
PO Box 464
Duncan, SC 29334

EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

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21

Please find below and/or attached an Office communication concerning this application or proceeding.

CLO21

Office Action Summary	Application No. 09/446,807	Applicant(s) DEPOORTER ET AL.	
	Examiner Marc A Patterson	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S.C. 112 second paragraph rejections of Claims 1, 6 and 23, of record on page 2 of the previous Action, are withdrawn.

REPEATED REJECTIONS

2. The 35 U.S.C. 112 second paragraph rejection of Claims 2 – 13, of record on page 2 of the previous Action, is repeated.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase 'both the patch' is indefinite as only one patch has been defined. For purposes of examination, the phrase will be assumed to mean 'the patch.'

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 – 3 and 5 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady et al (WO96/00688).

With regard to Claim 1, Brady et al disclose an end – seal patch bag (page 19, lines 15 – 31; Figure 1) comprising a tubular bag (page 26, lines 8 – 29) and a heat – shrinkable patch comprising a patch film, the patch being adhered to the bag (page 26, lines 8 – 29), the patch extending across an entire width of a first lay – flat side of the tubular bag (the patch has an overhang region, and therefore is wider than a lay – flat side of the bag; page 26, lines 8 – 29); the bag has a seal across its bottom, which is continuous across the entire width of the lay – flat bag film (bottom seal; page 19, lines 15 – 31); with regard to the claimed aspect of the seal being ‘through the patch as well as through both lay – flat sides of the bag,’ Brady et al teach that it is well – known in the art to seal through the patch as well as through the lay – flat sides of the bag, although the seal is weaker than a seal which is only made through the bag (page 19, lines 8 – 14); the claimed aspect of the seal being ‘through the patch as well as through both lay – flat sides of the bag’ therefore reads on Brady et al.

With regard to Claims 2, 6 and 10, Brady et al also disclose an end – seal patch bag (page 19, lines 15 – 31; Figure 1) comprising a tubular bag (page 26, lines 8 – 29) and a heat – shrinkable patch comprising a patch film, the patch being adhered to the bag (page 26, lines 8 – 29), the patch extending across an entire width of a first lay – flat side of the tubular bag (the patch has an overhang region, and therefore is wider than a lay – flat side of the bag; page 26, lines 8 – 29); the bag has a seal across its bottom, which is continuous across the entire width of

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the lay – flat bag film (supplemental bottom seal; page 19, lines 15 – 31); the seal is through the patch and both lay flat sides of the bag (page 19, lines 15 – 31).

With regard to Claim 3, a second patch is adhered to the bag (page 26, lines 8 – 29).

With regard to Claim 4, the patch bag is a side – seal patch bag (page 30, lines 21 – 29) and therefore has a first seal along a first edge of the bag and a second seal along a second edge of the bag; the bottom end of the bag is not opened (only the top of the bag is opened; page 30, lines 21 – 29).

With regard to Claim 5, the patch bag comprises a bottom seal (page 31, lines 1 – 7).

With regard to Claim 7, the patches are adhered to the tubular bag film with adhesive (page 28, lines 9 – 16).

With regard to Claims 8 – 9, the patches are adhered to an outside surface of the tubular bag film (page 28, lines 17 – 32; Figure 1), and the entirety of the patch films are adhered to the tubular bag film (the patches have a greater width than a lay – flat width of the bag, but overhang the edges; page 28, lines 18 – 23; Figure 11).

With regard to Claims 11 – 12, the films through which the seal is made have a total thickness of 10 – 20 mils (page 20, lines 8 – 20).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO96/00688).

Brady et al disclose a heat – sealed bag as discussed above. Brady et al fail to disclose a bag in which the seal has a width of 0.015 inch to 0.25 inch. However, Brady discloses a bag in which the seal has a width of less than 13 – 17 inches (the width of the bag; page 1, lines 28 – 35). Therefore, the width of the seal would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the width of the seal, since the width of the seal would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Brady et al. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO96/00688) in view of Herrington (U.S. Patent No. 4,561,109).

Brady et al disclose a heat – sealed bag as discussed above. Brady et al fail to disclose a bag having a folded bottom.

Herrington teaches the use of a folded bottom in a heat – sealed bag for the purpose of forming a pouch shape (column 2, lines 41 – 50).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a folded bottom in Brady et al in order to form a pouch shape as taught by Herrington.

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10. Claim 14 – 15, 17 and 19 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO96/00688) in view of Samson (U.S. Patent No. 3,616,004).

With regard to Claim 14, Brady et al disclose a process for making a patch bag comprising adhering first and second patch films to an outside surface of a first lay – flat side of a lay – flat bag tubing (page 26, lines 8 – 29), both patch films having a width greater than the width of the lay – flat tubing (page 29, lines 18 – 23), sealing an inside surface of the film tubing to itself, the sealing being carried out by applying heat to each of the patch outside surfaces (through the entire laminate; page 30, lines 5 – 13) and cutting across the tubing (page 26, lines 8 – 29). Brady et al fail to disclose heat which is applied by a first means for heating and second means for heating, the first and second means for heating being in alignment with one another, with the patches and bag tubing therebetween during sealing.

Samson teaches a method of sealing films (column 1, lines 20 – 30) which comprises applying heat by a first and second means for heating (jaws; column 2, lines 33 – 38), the first and second means for heating being in alignment (the jaws are forced together; column 2, lines 33 – 38); with the films therebetween during sealing (column 2, lines 33 – 38) for the purpose of sealing films with strength and uniformity (column 1, lines 4 – 11).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for disclose heat which is applied by a first means for heating and second means for heating, the first and second means for heating being in alignment with one another, with the patches and bag tubing therebetween during sealing in Brady et al in order to seal the films with strength and uniformity as taught by Samson.

With regard to Claims 15, and 17, the means for heating comprise seal bars (seal jaws) as discussed above. With regard to the claimed aspect of the seal bars having a 'flat surface,' Samson teaches that the bars are used for heat – sealing films (column 1, lines 4 – 11). The claimed aspect of the seal bars having a 'flat surface' therefore reads on Samson.

With regard to Claims 19 – 20, each seal bar is in a jaw assembly (each bar is held by jaws; column 2, lines 18 – 25) and comprise means for shock absorption which comprises a member (a metal gauge; column 2, lines 9 – 12).

11. Claims 16, 18 and 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (WO96/00688) in view of Samson (U.S. Patent No. 3,616,004) and further in view of Shabram (U.S. Patent No. 3,340,776).

Brady et al and Samson disclose a method of heat sealing comprising seal bars as discussed above. With regard to Claims 16 and 18, Brady et al and Samson fail to disclose seal bars having a convex surface and seal bars which comprise nichrome.

Shabram teaches the use of a convex surface for the purpose of making a seal bar having simplified construction (column 4, lines 25 – 35) and nichrome wire as a heating element for the purpose of heating electrically (column 4, lines 2 – 24).

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a convex surface in Brady et al and Samson in order to make a seal bar having simplified construction as taught by Shabram and to have provided for nichrome wire in Brady et al and Samson in order to heat electrically as taught by Shabram.

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With regard to Claims 21 – 23, the means for heating which is taught by Samson comprises seal bars, as discussed above; the means therefore comprises a means for controlling voltage and current flowing through the nichrome wire in the sealing bars so as to monitor and control the temperature. Samson fails to teach a pressure of 2 – 8 kg/ cm² and a temperature of 180 – 400 degrees Fahrenheit. However, Samson teaches a pressure of 50 – 150 psi and a temperature of 220 degrees Celsius (column 2, lines 43 – 49). Therefore, the temperature and pressure would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the temperature and pressure, since the temperature and pressure would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Samson. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

ANSWERS TO APPLICANT'S ARGUMENTS

12. Applicant's arguments regarding the 35 U.S.C. 112 second paragraph rejections of Claims 1, 6 and 23, of record on page 2 of the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn.

Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1 – 3, 5 – 12 and 23 as being anticipated by Brady et al (WO96/00688), 35 U.S.C. 103(a) rejection of Claim 4 as being unpatentable over Brady et al (WO96/00688), 35 U.S.C. 103(a) rejection of Claim 13 as being unpatentable over Brady et al (WO96/00688) in view of Herrington (U.S. Patent No. 4,561,109), 35 U.S.C. 103(a) rejection of Claims 14 – 15, 17 and 19 – 22 as being unpatentable

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over Brady et al. (WO96/00688) in view of Samson (U.S. Patent No. 3,616,004) and 35 U.S.C. 103(a) rejection of Claims 16 and 18 as being unpatentable over Brady et al (WO96/00688) in view of Samson (U.S. Patent No. 3,616,004) and further in view of Shabram (U.S. Patent No. 3,340,776) of record on page 2 of the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, page 10 of Paper No. 20, that the recitation of a bag in the units 'inches of water' is not unconventional as inches of water represent a measure of the internal pressure inside the bag without failure. However, the volume of water to which the inches correspond is unclear, as is the water pressure. Furthermore, as stated on page 3 of the previous Action, inches are not the conventional units of strength. The Linear Ramp Hot Burst Grease Test.

Applicant also argues, on page 13, that the embodiment of Brady et al shown in Figure 11 is a, L – seal bag, not an end seal bag, with the bag portion not being a seamless tubing. However, as stated above, Figure 1 discloses an end seal bag, the bag portion being tubing. With regard to the claimed aspect of the bag tubing being 'seamless,' Brady et al do not teach a tubing which comprises seams. The claimed aspect of the tube being 'seamless' therefore reads on Brady et al.

Applicant also argues, on page 14, that various passages in Brady et al disclose that it is not desirable to seal the inside of the bag to itself by sealing through the patch. However, as stated above, although Brady et al teach that it is more desirable to seal only through the bag to obtain a seal having maximum strength, Brady et al teach that it is well known in the art to seal through the patch and bag, and do not explicitly teach against sealing through the patch and bag.

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Furthermore, as stated above, Brady et al teach a supplemental seal which is preferably through the patch and bag.

Applicant also argues, on page 16, that the combination of Brady et al and Samson is improper because Samson teaches the use of two aligned individually heated sealing jaws for sealing multilayer films in which the layers have alternating high and low melting points; Brady et al, Applicant argues, teaches the sealing of layers in which the layers have similar melting points. However, both Samson and Brady teach the sealing of multilayer films through the entire laminate. Therefore, as stated on page 2 of the previous Action, it would be obvious for one of ordinary skill in the art to provide for first and second heating bars in alignment with one another in order to seal the films with strength and uniformity as taught by Samson.

Applicant also argues, on page 17, that Shabram does not teach a second seal bar having a convex surface which is in alignment with, and oriented toward the flat surface of the first seal bar. However, column 4, lines 30 – 35 of Shabram teach that the upper and lower seal bars have convex members; the upper and lower seal bars are clearly aligned, thus the convex surface of each bar is in alignment with and oriented toward each portion of the other bar.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold


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Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson

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HAROLD PYON
SUPERVISORY PATENT EXAMINER
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11/3/03